

(19) World Intellectual Property  
Organization  
International Bureau



554403

(43) International Publication Date  
11 November 2004 (11.11.2004)

PCT

(10) International Publication Number  
**WO 2004/098232 A1**

(51) International Patent Classification<sup>7</sup>: **H04R 1/28**

(21) International Application Number:  
PCT/DK2004/000276

(22) International Filing Date: 22 April 2004 (22.04.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
PA 2003 00638 28 April 2003 (28.04.2003) DK

(71) Applicant (for all designated States except US): **OTICON A/S** [DK/DK]; Strandvejen 58, DK-2900 Hellerup (DK).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BÜRGER, Christian, C.** [DK/DK]; c/o Oticon A/S, Strandvejen 58, DK-2900 Hellerup (DK). **HANSEN, Jon, Palle** [DK/DK]; c/o Oticon A/S, Strandvejen 58, DK-2900 Hellerup (DK). **SKOVGAARD, Jørn** [DK/DK]; c/o Oticon A/S, Strandvejen 58, DK-2900 Hellerup (DK). **SØNDERSTED, Mark, R.** [DK/DK]; c/o Oticon A/S, Strandvejen 58, DK-2900 Hellerup (DK).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

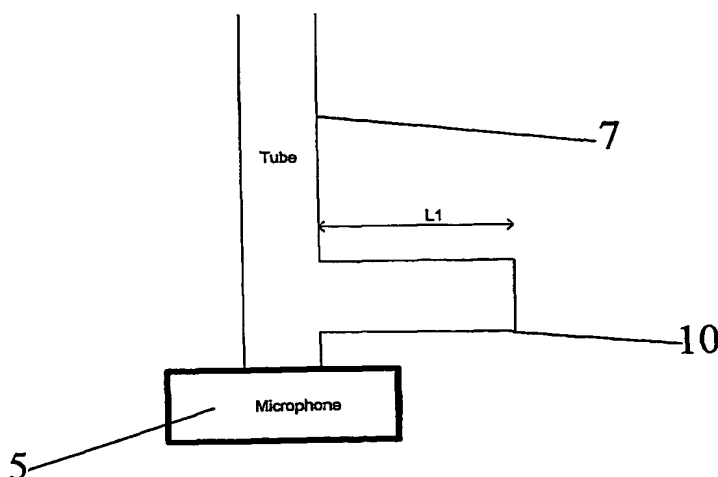
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MICROPHONE, HEARING AID WITH A MICROPHONE AND INLET STRUCTURE FOR A MICROPHONE



(57) Abstract: The invention comprises a microphone with a housing and an active element inside the housing for converting sound energy into electric energy whereby an inlet is provided for directing sound energy from the surroundings to the active element, whereby the inlet comprises a first tube part and a cavity in connection with the first tube part, whereby the cavity is dimensioned to dampen ultrasonic frequencies. The invention further comprises a hearing aid with a microphone such as a microphone. Further the invention concerns an inlet structure for a microphone.

WO 2004/098232 A1